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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,695	06/18/2001	Hirokazu Hoshino	108269-00006	8597
7590	01/26/2006			EXAMINER
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC 1050 Connecticut Avenue, N.W., Suite 600 Washington, DC 20036-5339			LEMMA, SAMSON B	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/881,695	HOSHINO, HIROKAZU	
Examiner	Art Unit		
Samson B. Lemma	2132		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 28 November 2005.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 2-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 2-6 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

## ***DETAILED ACTION***

1. The request filed November 28, 2005 for a request for continued examination (RCE) under 37 CFR 1.114 based on patent application 09/881,695 is acceptable and an RCE has been established. Accordingly, **claims 2-6 are pending and have been examined.**
2. **Independent claim 1** has been canceled.
3. **Claims 2-4** have been amended.

## ***Response to Arguments***

4. Applicant's remark/arguments filed on November 28, 2005 have been fully considered but they are not persuasive.

**Applicant first argued that the limitation in claim 2**, recited as "**that the second switch connects and disconnects the main control device and the second channel**" is not disclosed by the reference on the record. Applicant wrote the following in support of his argument,

"The Office Action asserts that Diamant teaches that the second switch connects and disconnects the main control device and the second channel. The Office Action asserts that Diamant teaches controller 1122 as the main control device. However, switching unit 1140 does not connect the secured network 1134 to controller 1122. Instead, switching unit 1140 connects the secured network 1134 to the computer 1102.

Similarly, switching unit 1142 fails to connect controller 1122 to public network 1136. Instead, switching unit 1142 connects public network 1136 to computer 1102. Therefore, Diamant fails to teach and/or suggest that the second switch connects and disconnects the main control device and the second channel."

**Examiner disagrees with this argument.**

**Examiner would point out that Diamanti referring to figure 14, discloses that communication interface 1116 is connected to the communication switch 1140 which meets the 2<sup>nd</sup> switch and to the secured network 1134.[Page 33, lines 10-11] Furthermore as shown on figure 14, the second switch which is met 1140 is connected to the controller 1122. Therefore this meets the limitation that that the second switch/1140 connects and disconnects the main control device/1122 and the second channel/secure network 1134.**

**Furthermore the secondary reference, namely Wakayama, also teaches the above limitation as shown/disclosed below.**

“A second switch for connecting and disconnecting said main control device and a second channel”; (figure 1, ref. Num “35” and ref. Num “36”) (Second channel is met the internal network or the “server” and switch “35” or switch “36” is used for connecting and disconnecting said main control of device or “DATA PUMP FILTER” in particular the “ANTI-VIRUS PROGRAM PHOTOCOUPLER CONTROL SYSTEM “30” and the second channel or server.)

**Applicant second argument is referring to the same claim 2,**

**Applicant wrote the following in support of his argument.**

“Consequently, a person of ordinary skill in the art would have no motivation to include the anti-virus program contained in the data pump 27 or 30 in either switching unit 1140 or 1142. Therefore, a person of ordinary skill in the art would not combine these two references in the manner suggested in the Office Action. Additionally, Wakayama is neither cited for, nor corrects, the deficiencies discussed above in Diamant. Even if these two references were combined (Applicant continues to assert that one of ordinary skill in the art would not combine these two references) the combination of these two references fails to teach and/or suggest the claimed invention. Specifically, the combination of these two references fails to teach and/or suggest a first buffer

**connected to the first channel.** The combination of these references also fails to teach and/or suggest that the first switch connects and disconnects the first buffer and the second buffer on the first channel. The combination of these two references also fails to teach and/or suggest that the second switch connects and disconnects the main control device and the second channel."

**Examiner disagrees with this argument.**

Examiner would point out that **Diamanti** referring to figure 14, discloses that communication interface 1112 is connected to the communication switch 1142 which meets the 1<sup>st</sup> switch and to the public network/first channel. And the communication switch 1142/the 1<sup>st</sup> switch is connected to the managing controller 1122/control device.[See Page 33, lines 6-8]. Like wise, as shown on figure 14, a first buffer [figure 14, 1128] is connected to the first channel. [figure 14, 1136]

Examiner further asserts the fact that **Diamanti** as shown on figure 14, teaches a first switch [figure 14, 1142] said first switch connects and disconnects said first buffer [figure 14, 1128] and said second buffer [figure 14, 1130] on the first channel.[figure 14,1136].It has also been disclosed that on page 33, lines 27- page 37, line 17 and figure 14, 1136, of the primary reference, namely **Diamanti**, that switch connection control apparatus is interposed between channels or between the internal network/secured network and the external network or internet or public network and exclusively selects a connection of one channel, either the internal network or the external network but not both at the same time.

Examiner also points out that one of the applicant argument is based on the canceled limitation. For instance the argument which is based on the following limitation recited as "the first switch connects and disconnects the first buffer and the second buffer on the first channel." is not supported with the amended claim because the phrase "on the first channel" is canceled by the applicant.

Examiner also asserts that, **Diamanti points out, a first buffer [figure 14, 1128] connected to the first channel. [figure 14, 1136]**

**Examiner furthermore asserts that the secondary reference namely, namely Wakayama, also teaches the above limitations, which are argued by the applicant, as shown/disclosed below.**

- A first buffer connected to a first channel; (The first buffer is connected to the external network 2 as shown on provided figure 5 by the applicant. Wakayama discloses that the first buffer which is met “RAM 24” which is connected with the external network or first channel which is met the “INTERNET 23” as shown on figure 1)
- A first switch for connecting/disconnecting said first buffer and said second buffer; (figure 1, ref. Num “33” and ref. Num “34”) (A first switch which is met the switch shown on figure 1, ref. Num “33” or ref. Num “34” is used for connecting/disconnecting the first buffer which is met ref. Num “24” shown on figure 1).

**As to the argument raised by the applicant to “no one or ordinary skill in the art would be motivated to combine these two references in the manner suggested in the Office Action, the examiner would point out that, the text for combining references is what the references as a whole would have suggested to one of ordinary skill in the art. See In re Scheckle, 168 USPQ 716 (CCPA 1971) In re McLaghlin 170 USPQ 209 (CCPA 1971). In re Young 159 USPQ 725 (CCPA 1968) and Furthermore, applicants cannot show non-obviousness by analyzing references individually where as here the rejection are based on the combination of the references. See In re Keller, 208 USPQ 871 (CCPA 1981)**

**Applicant's last argument is regarding the rest of the dependent claims.**

Applicants argued that since the independent claims are patentable therefore all the claims dependent thereon are also in condition for allowance for the same reasons argued for the independent claims.

**In response to the above argument by the applicant, the examiner response** discussed for the independent claims above is also valid towards this argument. Therefore every elements of the limitation of the claims including the newly added limitation to some of the claims is explicitly or implicitly suggested and disclosed by the combinations of the references on the record and the rejection remains valid. **Therefore all elements of the limitations of claim 2-6** is explicitly or implicitly suggested and disclosed by the references on the records. The rejections remains to be valid unless and otherwise the claims are further amended and overcome the rejection with out introducing new matters.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 2-6** are rejected under 35 U.S.C. 103(a) as being anticipated by **Diamant, Erez**. (hereinafter referred to as **Diamant**) (WO 99/42915) (International Publication Date 08/26/1999)(Provided with IDS) in view of **Hironori Wakayama**. (Hereinafter referred as **Wakayama**) (U.S. Patent No 6,026,502)

7. **As per claim 2, Diamant discloses a switch connection control apparatus [figure 14, 1122] which is interposed between a first channel of an external side (figure 14, 1142, 1136 and page 33, lines 6-8) and a second channel of an internal side (figure 14, 1140, 1134; page 33, lines 10-11) in order to physically separate the external side and the internal side (figure 1) (As shown on figure 1, the external or public network/first channel is physically separated from the internal side or second channel or secured network) comprising:**

**A main control device conducting and control of data.[figure 14, 1122]**

**A first buffer [figure 14, 1128] connected to the first channel. [figure 14, 1136]**

**A second buffer [figure 14, 1130] connected to said main control device [figure 14, 1122] the second buffer storing a request or data ;**

**A first switch [figure 14, 1142] said first switch connects and disconnects said first buffer [figure 14, 1128] and said second buffer [figure 14, 1130] (See also figure 14, 1136 and see also page 33, lines 27- page 37, line 17)**

**A second switch, said second switch connects and disconnects said main control device and a second channel [figure 14, 1122; 1140 and 1134]**

**A switch control section [figure 14, 1122] that outputs a control signal for exclusively connecting any one of said first and second switches and for exclusively disconnecting the other one of said first and second switches.[page 33, lines 27-page 34, line 17] (A switch connection control apparatus is interposed between channels or between the internal network/secured network and the external network or internet or public network and exclusively selects a connection of one channel, either the internal network or the external network but not both at the same time as explained on page 33, line 27-page 34, line 17) and a switch control section that outputs a control signal for in accordance**

**with the main control device.** [figure 14, 1122 and page 33, lines 25-29 and page 34, lines 7-9]

**Wherein said first switch and second switch always operates in a seesaw type for connecting and disconnecting the first channel and the second channel respectively.** [Page 33, lines 27- page 34, line 17]

**Diamant** does not explicitly disclose

- **a control device conduced a certification.**

However, in the same field of endeavor, **Wakayama** discloses

- A switch connection control apparatus for channels, (column 2, lines 11-30; figure 1, ref. Num “27” and ref. Num “30”), comprising:
  - **A main control device for conducting a certification and control of data;** (Column 2, line 19-36; column 3, lines 25-45; column 4, lines 24-47; figure 1, reference “DATA PUMP FILTER”, ref. Num “27” and ref. Num “30”) (The “DATA PUMP FILTER” shown on figure 1, reference “DATA PUMP FILTER” is comprises of two data pump namely the data pump “27” and “30” and is met as “the main control device” and is explained on column 3, lines 25-lines 45. It conducts certification or virus removal and control of data of the request by checking the existence of virus in the request when the data is found to be actually doubtfully contaminated with virus as explained on column 4, lines 31-37. The request could come from either direction, that is, it is either coming from the internal network or server or the external network side or internet. The request or the data is examined and certified by erasing the virus if there is any at the controlling devices, namely the data pump filters “27” and “30” by using the “ANTI-

VIRUS PROGRAM PHOTOCOUPLER CONTROL SYSTEM". Once the virus is removed the appropriate switch is exclusively turned on for transmitting the request or data from the requested network to the requesting network as explained on column 4, lines 24-47)

- A first buffer connected to a first channel; (The first buffer is connected to the external network 2 as shown on provided figure 5 by the applicant. Wakayama discloses that the first buffer which is met "RAM 24" which is connected with the external network or first channel which is met the "INTERNET 23" as shown on figure 1)
- A second buffer connected to said main control device for storing a request or data; ("RAM 29" which is met a second buffer is connected to the "DATA PUMP FILTER" which is met as main control device).
- A first switch for connecting/disconnecting said first buffer and said second buffer; (figure 1, ref. Num "33" and ref. Num "34") (A first switch which is met the switch shown on figure 1, ref. Num "33" or ref. Num "34" is used for connecting/disconnecting the first buffer which is met ref. Num "24" shown on figure 1).
- A second switch for connecting and disconnecting said main control device and a second channel; (figure 1, ref. Num "35" and ref. Num "36") (Second channel is met the internal network or the "server" and switch "35" or switch "36" is used for connecting and disconnecting said main control of device or "DATA PUMP FILTER" in particular the "ANTI-VIRUS PROGRAM PHOTOCOUPLER CONTROL SYSTEM "30" and the second channel or server.) and
- A switch control section that outputs a control signal for exclusively connecting/disconnecting any one of said first and second switches in

accordance with the main control device. (Column 2, lines 19-23; Figure 1, ref. Num "DATA PUMP FILTER"; ref. Num "33" and "34"; and ref. Num "35" and "36")

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to combine the features of conducting certification as per teaching of **Wakayama** into the method as taught by **Diamant** in order provide secure transmission.[ see **Wakayama** column 4, lines 31-37]

8. **As per claim 3, the combination of Diamant and Wakayama discloses the switch connection control apparatus as applied to claim 2 above. Furthermore Wakayama discloses the apparatus, wherein a first buffer includes certification means for verifying a correctness of a request or data from a first channel.** (Column 3, lines 19-24 and column 3, lines 31-38) (first channel is met as described above the external network or the "internet 23" as shown on figure 1 and the first buffer is met the "RAM-1" shown on figure 1, ref. Num 24. and the first buffer includes "ANTI-VIRUS PROGRAM" as shown on figure 1, in the link "keeper reference 20" to verify the correctness of the a request or data from the internet or the first channel.)

9. **As per claim 4, the combination of Diamant and Wakayama discloses the switch connection control apparatus as applied to claim 2 above. Furthermore Wakayama discloses the apparatus, wherein a main control device includes certification means for verifying a correctness of a request or data from a second channel.** (Figure 1, reference Num "30") (The main control device which is interpreted by the office as the "DATA PUMP FILTER" consists of unit "27" and unit "30" as shown on figure 1. Each unit or data pump filter 27 and 28 has ANTI-VIRUS PROGRAM PHOTOCOUPLER CONTROL SYSTEM for verifying the

correctness a request and when the data is found to be actually or doubtfully contaminated with viruses it will be deleted before transmitted as explained on column 4, lines 31-37. The main control device, unit "30" includes a certification means for verifying a correctness of the a request or data from a second channel or the server)

10. **As per claim 5 and 6, the combination of Diamant and Wakayama discloses the switch connection control apparatus as applied to claim 2 above. Furthermore Wakayama discloses the apparatus, further comprising:**

- **A third buffer disposed between said main control device and said second switch, the third buffer storing a request or data; (Ref. Num "39")** (As shown on figure 1, buffer "39" is disposed between the main control device which is interpreted as unit "27" and the second switch which is switch "35")
- **A fourth buffer disposed between said second channel and said second switch, the fourth buffer storing a request or data.** (Ref. Num "40" or ref. Num "41") (a fourth buffer which is met either buffer "40" or "41" shown on figure 1, is disposed between said second channel which is met the "Server" and second switch which is met switch "35" for storing a request or data as explained on column 5, lines 47-59)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm).

Art Unit: 2132

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAMSON LEMMA  
S.L.  
01/14/2005

*Gilberto Barron Jr.*  
GILBERTO BARRON JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100